

SUPERFUND RESPONSE ACTION PRIORITY PANEL REVIEW FORM

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Date Form Completed: 10/24/2011

General Site Information

Region:	6	City:	Odessa	State:	TX
CERCLIS EPA ID:	TXN000606614	CERCLIS Site Name:	East 67 th Street Ground Water Plume		
NPL Status: (P/F/D)	F	Year Listed to NPL:	2007		

Brief Site Description: *(Site Type, Current and Future Land Use, General Site Contaminant and Media Info, Site Area and Location information.)*

The Site is located in Ector County, immediately adjacent to the City of Odessa, Texas. The former Delta Solvents Company facility is located at 108 East 67th Street, and the facility is now owned and operated by Brenntag Southwest Inc. Due to vandalism in 1985, various product chemicals were discharged directly onto the ground totaling approximately 15,229 gallons, of which 635 gallons were labeled as "Perk" or tetrachloroethene (PCE). According to the Delta Solvents spill report dated March 9, 1985, valves had been randomly opened in both the truck loading area and at the bottom of the storage tanks. The spill volume was determined from the product inventory. Delta Solvents also reported the vandalism and spill to the Ector County Sheriff's Department. The ground water contaminant plume is in the Trinity and Ogallala aquifer, which is the only source of drinking water for residents and businesses in the County. The City of Odessa water supply is from a series of lakes that is piped to the City water treatment system. Ground water is the primary exposure route for the site contaminants.

General Project Information

Type of Action:	Remedial Action	Site Charging SSID:	06ZP
Operable Unit:	00	CERCLIS Action RAT Code:	RA
Is this the final action for the site that will result in a site construction completion?		X Yes	<input type="checkbox"/> No
Will implementation of this action result in the Environmental Indicator for Human Exposure being brought under control?		X Yes	<input type="checkbox"/> No

Response Action Summary

Describe briefly site activities conducted in the past or currently underway:

The Site was identified by the TCEQ during routine monitoring of public water supply systems in 2005. Contaminants were first detected above background concentrations at one of the four public supply wells at the DeVilla Mobile Home Park located on VFW Lane. The TCEQ subsequently expanded the sampling activities to include the surrounding private water supply wells in March 2005. Granular activated charcoal filtration systems have been installed and maintained by the TCEQ on eleven private wells exceeding the maximum contaminant level (MCL) of 5 micrograms per liter (µg/L) for PCE. The EPA completed the RI/FS in 2010. Field activities at the Site were performed between 2007 and 2010.

Specifically identify the discrete activities and site areas to be considered by this panel evaluation:

- Installation of a water supply line from the City of Odessa to replace existing filtration systems on County residences and businesses within the contaminated plume area.
- Installation of a ground water extraction and treatment system to contain the contaminant plume and in-situ treatment (reductive dechlorination) of the VOCs in the ground water beneath and adjacent to the spill area to restore the Ogallala and Trinity aquifers. Treated water will be returned to the Ogallala aquifer via injection wells or will be piped to a 3rd party for beneficial reuse.
- Installation of a soil vapor extraction system to address VOCs in the unsaturated (vadose) zone.

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Briefly describe additional work remaining at the site for construction completion after completion of discrete activities being ranked:

No additional remedy components.

Response Action Cost

Total Cost of Proposed Response Action:

(\$ amount should represent total funding need for new RA funding from national allowance above and beyond those funds anticipated to be utilized through special accounts or State Superfund Contracts.)

Total Capital Costs: \$6,600,000 (\$5,340,000 from the Fund; \$660,000 from the State of Texas).

Drinking Water Remedy: \$1,801,000

Ground Water Remedy: \$3,114,000

Source Area Remedy: \$1,662,000

Annual O&M Costs: \$926,000 – 1,700,000

Source of Proposed Response Action Cost Amount:

(ROD, 30%, 60%, 90% RD, Contract Bid, USACE estimate, etc...)

ROD

Breakout of Total Action Cost Planned Annual Need by Fiscal Year:

(If the estimated cost of the response action exceeds \$10 million, please provide multiple funding scenarios for fiscal year needs; general planned annual need scenario, maximum funding scenario, and minimum funding scenario.)

Construction costs can be separated by the costs for well installation in the Ground Water and Source Area remedies and the remaining costs for the above ground treatment systems and associated piping.

Estimated well installation costs: \$2,000,000

Remaining treatment system components: \$4,600,000

Other information or assumptions associated with cost estimates?

Readiness Criteria

1. Date State Superfund Contract or State Cooperative Agreement will be signed (Month)?

February 2012.

2. If Non-Time Critical, is State cost sharing (provide details)?

NA

3. If Remedial Action, when will Remedial Design be 95% complete?

The water line design for the drinking water remedy is complete.

The Remedial Design for the Ground Water and Source Area remedies can be completed as separate actions to

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allow phased construction of the remedy. The Remedial Design for the well installation portion of the Ground Water and Source Area remedies can be completed in June 2012 (if funded) and the remaining Remedial Design for the treatment system components can be completed by December 2012.

4. When will Region be able to obligate money to the site?

2nd quarter FY12 for the Drinking Water Remedy.

July 2012 for the Ground Water and Source Area remedies

5. Estimate when on-site construction activities will begin:

3rd quarter FY12 for the Drinking Water Remedy

August 2012 for the Ground Water and Source Area remedies.

6. Has CERCLIS been updated to consistently reflect project cost/readiness information?

Yes

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Criteria #1 - RISKS TO HUMAN POPULATION EXPOSED (Weight Factor = 5)

Describe the exposure scenario(s) driving the risk and remedy. Include risk and exposure information on current/future use, on-site/off-site, media, exposure route, and receptors:

Ground water is the primary source of drinking water for County residents and businesses. The PCE plume has migrated to a residential neighborhood in the County that is dependent on private supply wells for their drinking water. The residential lot sizes are approximately 50 x 150 ft.

Estimate the number of people reasonably anticipated to be exposed in the absence of any future EPA action for each medium for the following time frames:

MEDIUM	<2yrs	<10yrs	>10yrs
Ground Water	<100	<200	<500

Discuss the likelihood that the above exposures will occur:

In the absence of EPA action, the State would likely continue to maintain and install additional filtration systems to prevent exposure to contaminants via private water supply wells.

Other Risk/Exposure Information?

Ground water contaminant plume is migrating at an approximate rate of 125 ft/year.

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Criteria #2 – SITE/CONTAMINANT STABILITY (Weight Factor = 5)

Describe the means/likelihood that contamination could impact other areas/media given current containment:

Ground water contaminant plume is migrating at an approximate rate of 125 ft/year.

Are the contaminants contained in engineered structure(s) that currently prevents migration of contaminants? Is

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this structure sound and likely to maintain its integrity?

No; the ground water contamination is not contained within the aquifer.

Are the contaminants in a physical form that limits the potential to migrate from the site? Is this physical condition reversible or permanent?

No; the VOCs are dissolved in the ground water. A DNAPL is not present at the source area.

Are there institutional physical controls that currently prevent exposure to contamination? How reliable is it estimated to be?

No; the planned ICs for this site are for informational purposes only and will satisfy State requirements for implementation of ICs at sites with long-term cleanup.

Other information on site/contaminant stability?

Natural attenuation processes in the ground water have not prevented plume migration at the site.

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Criteria #3 – CONTAMINANT CHARACTERISTICS (Weight Factor = 3)

(Concentration, toxicity, and volume or area contaminated above health based levels)

List Principle Contaminants (Please provide average and high concentrations.):

(Provide upper end concentration (e.g. 95% upper confidence level for the mean, as is used in a risk assessment, or maximum value [assuming it is not a true outlier], along with a measure of how values are distributed {e.g. standard deviation} or a central tendency values [e.g., average].)

<u>Contaminant</u>	<u>*Media</u>	<u>**Concentrations</u>
Tetrachloroethene	GW	100 µg/L (max. value)/22 µg/L (95%)
Trichloroethene	GW	14 µg/L (max. value)/2 µg/L (95%)
1,2-Dichloroethene	GW	190 µg/L (max. value)/36 µg/L (95%)

*(*Media: AR – Air, SL – Soil, ST – Sediment, GW – Groundwater, SW – Surface Water)*

*(**Concentrations: Provide concentration measure used in the risk assessment and Record of Decision as the basis for the remedy.)*

Describe the characteristics of the contaminant with regards to its inherent toxicity and the significance of the concentrations and amount of the contaminant to site risk. *(Please include the clean up level of the contaminants discussed.)*

Ground water clean up levels are MCL based for the 3 primary contaminants in ground water: PCE at 5 µg/L; TCE at 5 µg/L; and, cis-1,2-DCE at 70 µg/L. PCE/TCE are a probable human carcinogen; 1,2-DCE is not a carcinogen. The PCE/TCE/cis-1,2-DCE plumes are generally coincident throughout the Site with the max concentrations observed beneath or adjacent to the former spill area.

Describe any additional information on contaminant concentrations which could provide a better context for the distribution, amount, and/or extent of site contamination. *(e.g. frequency of detection/outlier concentrations, exposure point concentrations, maximum or average concentration values, etc.....)*

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Maximum ground water concentrations remain within or adjacent to the source area.

Other information on contaminant characteristics?

DNAPL is not present at the Site based on observed PCE concentrations in the ground water.

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Criteria #4 – THREAT TO SIGNIFICANT ENVIRONMENT (Weight Factor = 3) <i>(Endangered species or their critical habitats, sensitive environmental areas.)</i>	
Describe any observed or predicted adverse impacts on ecological receptors including their ecological significance, the likelihood of impacts occurring, and the estimated size of impacted area:	
There is no ground water to surface water discharge and thus no impacts to ecological receptors from contaminated ground water.	
Would natural recovery occur if no action was taken? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, estimate how long this would take.	
NA	
Other information on threat to significant environment?	
NA	
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Criteria #5 – PROGRAMMATIC CONSIDERATIONS (Weight Factor = 4) <i>(Innovative technologies, state/community acceptance, environmental justice, redevelopment, construction completion, economic redevelopment.)</i>	
Describe the degree to which the community accepts the response action.	
The community is supportive of the planned response action. The residents and businesses prefer the installation of a water supply line to eliminate the filtration units. The filtration units restrict total well flow and residents are still reluctant to use post-filtration water for consumption. The City of Odessa has agreed to supply area outside the city limits.	
Describe the degree to which the State accepts the response action.	
The TCEQ is supportive of the planned response action. The installation of the water supply line will allow removal of the filtration units and the elimination of the annual O&M costs (100% State costs).	
Describe other programmatic considerations, e.g.; natural resource damage claim pending, Brownfields site, use of innovative technology, construction completion, economic redevelopment, environmental justice, etc...	
Construction completion target for FY2013.	